

Book

Leo Kanner, Hans Asperger, and the discovery of autism

Steve Silberman discovered a well-kept secret about autism. In his stunning big book *NeuroTribes* (big in size at more than 500 pages, and big in vision, spanning the history of autism from the late 19th century to the present day), he imparts the secret, drip-feeding it through a remarkable narrative, in one of the most fascinating accounts of autism I have ever read. At one level, this is a who-done-it, in keeping with Silberman's profession of investigative journalist. He digs into the detail of people's lives, and uncovers the secret that one scientist tried to hide.

As everyone in the autism community knows, child psychiatrist Leo Kanner at Johns Hopkins University School of Medicine in Baltimore, MD, USA, wrote a seminal article in 1943 in which he described—"for the first time"—11 children in his clinic without the social instinct to orient towards other people, who were mostly focused or even obsessed with objects, and who had a "need for sameness" or a "resistance to (unexpected) change". To give a name to this new psychiatric condition, Kanner coined the term "infantile autism". Kanner's article made medical history, as befits someone who discovers a new medical condition. But just 1 year later, paediatrician Hans Asperger, at the University of Vienna in Austria, wrote an article describing a group of children in his clinic who shared many of the same features. Kanner's paper became highly cited and high profile, whereas Asperger's article went almost unnoticed.

For almost 40 years, the English-speaking autism community knew almost nothing about Asperger's article. Then, in 1981, child psychiatrist Lorna Wing at the UK's Institute of Psychiatry in London published an article that brought it to the world's attention. The autism community

assumed that the reason Asperger's article had languished in the shadows was because it was written in German. And for the past 35 years since Wing's article, the autism community assumed that, since Kanner claimed he had no awareness of Asperger's work, this was just one of those strange cases of two scientists independently discovering the same medical condition, coincidentally within a year of each other. Enter Silberman, whose job as a journalist is to dig deeper, to check the truth of our assumptions.

"In science, as in commerce, or exploring space, being there first is important, and Silberman sees the real importance of what he has stumbled upon."

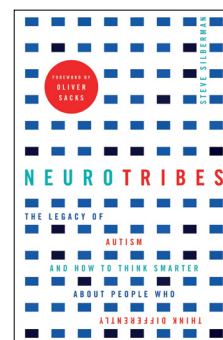
Silberman goes back in time, to peek into the clinics of Kanner and Asperger separately, to see what they were up to. He discovers Asperger to be a modest, unassuming man, half a century ahead of his time in designing a school for the children he saw that suited their differently wired cognitive style, playing to their strengths rather than focusing on their difficulties. Silberman finds that Asperger's group of patients were diverse, ranging from one child who was mute to another child who was articulate to the point of pedantry, from the boy who flapped his hands repetitively to the child who obsessively collected minutiae about astronomy. Asperger coined a name for his group of patients: autistic psychopathy.

Asperger described his patients across a wide age range, and how their social and obsessive characteristics blur into what, outside the clinic setting, would simply be described as eccentricity or expertise. Although Asperger saw this wide range of individuals—what today would be called the "autism spectrum"—he

placed special emphasis on those he likened to "absent-minded professors", who showed precocious interest in systems and how things work, despite their social awkwardness and difficulties in social understanding. Silberman discovers that Asperger was lecturing about these children as early as 1938, some 5 years before Kanner's announcement of the "discovery" of autism. In science, as in commerce, or exploring space, being there first is important, and Silberman sees the real importance of what he has stumbled upon.

Silberman is open-minded and hoped to find that Kanner's failure to cite Asperger's work in his 1943 article was simply ignorance, not intellectual theft. As Silberman travels back in time and enters Kanner's clinic, he catalogues the many positive contributions that Kanner made, including how he helped nearly 200 Jewish refugee doctors flee to the USA from the Holocaust, and how Kanner humanised American psychiatric institutions. But Silberman also finds something altogether more disturbing: a man who was desperate to make his name in the history of medicine, and who seemed to have been willing to do some rather underhand things to achieve this goal.

Far from finding Kanner to be a man who was unaware that some 4000 miles away in Vienna, struggling under Nazi occupation, a fellow physician had described a similar group of patients, Silberman unearths evidence that Kanner must have known about Asperger's work. How? Because Georg Frankl, the chief diagnostician in Asperger's clinic in 1938, came to Johns Hopkins University to work in Kanner's clinic later that year. Long before the internet or email, the transmission of scientific ideas could nevertheless flow from one lab to another through



NeuroTribes: The Legacy of Autism and How to Think Smarter about People who Think Differently
Steve Silberman.
Allan and Unwin, 2015.
Pp 544. £16.99
ISBN 9781760113636



Wellcome Library, London

Henry Cavendish (1731–1810), aquatint by C Rosenberg after W Alexander

a doctor working in both. Frankl had crossed the Atlantic and Silberman’s argument is that Kanner heard about these special children in Vienna, found some similar ones in his Baltimore clinic, and repackaged them as his own discovery.

Intellectual theft—if true—is a serious allegation, but Silberman identifies some additional acts that Kanner was also guilty of. One was stating that the parents of children with autism were cold and unemotional types, and that in the heyday of psychoanalysis engaging in parent-blaming, Kanner blamed parents for causing their child’s autism. Although he covered himself by also inserting the word “inborn” in his 1943 paper, Kanner promoted the idea of toxic parenting being a cause of autism. In the history of autism we tend to think that psychologist Bruno Bettelheim was

the originator of this unfair, unkind, and groundless “psychogenic” theory that led to “parentectomy”, with parents—particularly mothers—being discouraged from visiting their child in residential school. But it seems that Bettelheim was just a high-profile exponent of Kanner’s original “refrigerator parent” idea.

Silberman identifies other acts that Kanner was responsible for, which he argues set the field back decades. First, Kanner insisted that autism was a condition of infancy, putting the spotlight on early childhood and rendering adolescents and adults with these traits invisible, so keen was he to establish the new field of child psychiatry. Second, Kanner insisted that autism was rare, giving rise to the myth that the prevalence was four in 10 000 people, even though in London during the 1970s Lorna Wing and Judy Gould had already found it was between four and five times more common than this. Third, Kanner insisted that autism was a well-delineated narrow category, even though others were finding the category had blurred edges and was more of a spectrum. Asperger made none of these mistakes. The effect of Kanner’s dogmas was to leave those with Asperger’s syndrome—this “neurotribe”—out in the cold, unknown and unnoticed, for much longer than needed to be the case.

Silberman is not the first to suggest that Asperger’s work pre-dated Kanner’s (Adam Feinstein makes a similar point in his valuable book *A History of Autism: Conversations with the Pioneers*), but Silberman is the first to have found the existence of Frankl, the link between the two scientists. Silberman’s dethroning of Kanner is monumental in several ways. First, Silberman portrays the founding father of child psychiatry as guilty of suppressing the truth about his discovery, a little like how James Watson and Francis Crick took the credit for the discovery of the double-helix structure of DNA without

acknowledging the contribution of Rosalind Franklin. Second, Silberman tells a story about a much wider set of people on the autism spectrum who were previously invisible under Kanner’s rubric, and who Silberman argues included those socially awkward but technically talented individuals who invented wireless communication through hand-held radios, the precursor to the internet, and who included distinguished scientists such as Henry Cavendish and Paul Dirac, both in Cambridge. Silberman describes how Cavendish showed all the features of Asperger’s syndrome. Cavendish was a genius at devising extraordinarily precise methods to answer hitherto intractable scientific problems in the 1790s, such as calculating the density of the Earth, but he went to extreme methods to avoid people. Third, Silberman paints a portrait of a people who needed a diagnosis, were overlooked and excluded by the psychiatric profession and their diagnostic handbook the *Diagnostic and Statistical Manual of Mental Disorders*, and so suffered unnecessarily for decades.

Finally, in a style that could apply to any civil rights liberation movement, Silberman provides a voice for a minority who think differently, those overlooked millions of people on the autism spectrum who, because of Kanner’s insistence on a narrow category in childhood, were denied access to services and help. Silberman’s book will be valued by many as telling a triumphalist story after decades of silencing, including the silencing of the doctor who actually discovered autism. *NeuroTribes* provides an alternative to the medical or disease model of autism and sits more comfortably with the modern neurodiversity model, and is ultimately a book that respects and humanises those who are its focus.

Simon Baron-Cohen

Autism Research Centre, Cambridge University, Cambridge CB2 8AH, UK
sb205@cam.ac.uk